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ABSTRACT

The use of information technology (IT) in higher education in Arab universities must become a reality. Equipping the institutes of education with the technology does not mean that the education system has fulfilled the requirement for such change. The key component to implement such change is the educator, especially the educator in the higher institutes of learning, since he is looked upon as a leader in educational reform. However, to do so, faculty development must be initiated to enable the educator to make educated decisions on how to integrate IT into the teaching and learning environment to enhance the overall learning process. Building confidence in the educator remains the universal pedagogical challenge. The author believes that this challenge can be addressed only when an educator understands the relationship between IT and learning theories and conditions, when he has familiarity with the technology and the application in question, when he can use IT effectively in the learning environment, and when he accepts his new role. Armed with such knowledge and skill, the highly respected Arab scholar or training is empowered and ready to act. (Contains 49 references.) (Author/MES)

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A CONFIDENT ARAB SCHOLAR: FACULTY DEVELOPMENT AND TECHNOLOGY

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ABSTRACT

The use of information technology in higher education in Arab Universities must become a reality. Equipping the institutes of education with the technology does not mean that the education system has fulfilled the requirement for such change. The key component to implement such change, Sabieh points out, is the educator, especially the educator in the higher institutes of learning since he is looked upon as a leader in educational reform. However, to do so, faculty development must be initiated to enable the educator to make educated decisions on how to integrate information technology into the teaching and learning environment to enhance the overall learning process. Building confidence in the educator remains the universal pedagogical challenge. Sabieh believes that this challenge can be addressed only when an educator understands the relationship between IT and learning theories and conditions, when he has familiarity with the technology and the application in question, when he can use IT effectively in the learning environment, and when he accepts his new role. Armed with such knowledge and skill, the highly respected Arab scholar or trainer, Sabieh advocates, is empowered and ready to act.

Profound, realistic, and confident are what an educator becomes as a result of faculty development in technology use. The use of information technology in higher education in Arab Universities must become a reality. The educator must face globalization prepared and he must, in turn, ensure that his students are able to survive in the world. They both must realize the full potential of education in the digital world. For years, the administrators, on their part, have thought that they have met both the educator's and the students' need for the 21st century. They have 'sold' their institutions to the public by advertising the upgrading of their educational systems with the computer. In Lebanon, all the institutes of higher education are equipped with technology. Yet, only seven percent of the educators in such institutes claim that they know what information technology is; they say that they have their students 'use the internet for information' to help them gather a better understanding of the material or to collect data for their research. Moreover, seventy five percent of them claim to use technology in their students' educational enhancement. Ten percent of them claim to have the possibility of technology set-ups in the classroom or lab settings. Five percent use the computer as an instructional tool; the educator in these cases may use the technology to problem solve, to present his class lecture, to plot figures. Furthermore, ninety five percent of those who claim to use the technology to enhance their student's education have the students use it as an end tool like a calculator, typewriter, figure-organizer and presentation editor. This is not how a computer pedagogically is to be used to enhance the students' learning. Sabieh stresses equipping the institutes of education with the technology does not mean that the education system has fulfilled the requirement for such change.

The key component to implement such change, Sabieh points out, is the educator, especially the educator in the higher institutes of learning since he is looked upon as a leader in educational reform. To do so, the educator must be confident in applying the

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knowledge and acts needed to bring about reformation. The educator must understand the theoretical framework, the possible approaches and strategies involved and the application of the technology in practice (Pachler 1999). In accordance with Sutphin (1987), an understanding of the ways the computer is to be used in the education field must take place before the educator develops the skill of computer use since the computer is a more complex tool when compared to other tools. However, to build confidence in the educator remains the universal pedagogical challenge. Confidence is a by-product of having knowledge. An educator has to be able to communicate the knowledge, has to be aware of the fear and has to be able to communicate the fear. He has to be able to share with others, to see the overall picture of learning and to make the appropriate adjustments to promote learning.

The purpose of this paper is to show that faculty development must be initiated to enable the educator to make confident and educated decisions on how to integrate information technology into the teaching and learning environment to enhance the overall learning process. Faculty development training is essential if effective and powerful use of the technology is expected (Hurst 1994; Sutphin 1987). This may be implemented through pre-service, in service or post-service training.

Sabieh believes that the challenge can be addressed only when an educator understands the relationship between IT and learning theories and conditions, when he has familiarity with the technology and the application in question, when he can use IT effectively in the learning environment, and when he accepts his new role. Once armed with such knowledge and skill, the highly respected Arab scholar or trainer, Sabieh advocates, is empowered and ready to act.

DEFINING TECHNOLOGY: IT & IT

For an educator to understand the relationship between technology and learning theories and conditions, he must first and foremost clearly understand the meaning of information technology and instructional technology. Information technology, simply put, according UNESCO (1992) and Brisebois (1991), is the technology. It includes the use of electronic and other technologies to aid in the production, acquisition, encoding, processing, storing, retrieving and distributing of digital information that may be vocal, pictorial, textual and numerical. Thus, the technology may identify computers, communication satellites, fiber optics, video-conferencing as possible technologies for use within the education system. To put information technology into an education setting to promote teaching and learning, it is instructional technology at play. According to Silber (1970), instructional technology is the expansion of instructional systems and the supervision of that development in a methodical manner with the purpose of solving educational problems. It is the utilization of tools to get messages and material to educators and students alike. It concerns the use of hardware and software in the class, in the lab, in the curriculum, in methodology, in subject matter, in teaching skills, in student learning and in student achievement. The educator must be conscious that a relation is at play between the tool, the information and the environment which parallels the learning theories, conditions and outcomes since the goal of an educator, according to Barr and Tagg (1995), is to improve the quality of instruction to improve the quality of learning.

SUMMARIZING THE LEARNING THEORIES AND CONDITIONS

Second, the educator, irrespective of the subject matter he teaches, must understand how the students learn. This is especially true of an educator who teaches in the fields of science. Davis (1996) noted that, in his teaching, the math educator is adopting learning theories more closely than before. Accordingly, the math teacher listens to his students' problem solving explanations and recognizes their advanced ability. Davis also notes that the educator tends to plan his activities in a way to develop complex sequencing of thought processes enhancing the students' assimilation of the subject. In short, the educator, especially the science educator, has become more aware of the importance and commitment to classroom practice, to exploring and experimenting with teaching innovations in accordance with the major learning theories, be it the mental theories, behavioral theories, the cognitive theories, the multiple intelligence theory, theories of learning styles and brain based education theories. For as Guild (1997) advanced, although the theories are diverse, most promote learner-centered commitment, reflective practice and decision making on both the part of the educator and the students to enhance the learning outcome. Guild notes that the problem faced currently in the education setting is that many students are not learning successfully and that the educator must take on a responsible role to tackle this dilemma by focusing on how it is that students learn.

Taking into account that students are individuals who process information effectively in their own way, Sabieh (1999b; 1998) summarizes the way information is processed and learnt. The students, by way of an external stimulated environment receive information. The students use their senses to register and transfer the sensation into neural information to be perceived and stored for a time period of one to two seconds. In turn, the information is, then, selected and encoded, and it is given meaning, which is transformed into schema where assimilation and accommodation takes place. They, then, determine if the information is to be stored in their memory or is to be responded to. The students determine which mode of response is needed; be it verbal, or motor; sequenced and timed, to answer the environment. The students plan, initiate, guide and terminate the behavioral and cognitive activities. Therefore, they selectively attend to the information based on the degree of precedence the information has in relation to their learning needs and motivation.

In a stimulating environment, the students' minds are active, and they continuously rehearse and drill the new information to increase their recognition, understanding and intrinsic mental power. They take on a responsible role in the process of their learning linking and associating the past with the present and the future to enrich their information acquisition. Their learning is immediately reinforced contingent upon their learning responses pushing the way to building confidence in themselves, self-esteem, status, perseverance and motivation. They are curious and willing to explore their learning environment to receive the maximum learning experience. Their learning may be explanatory, exploratory, imaginative and creative. They are stimulated, so they respond, chain, associate, discriminate, form concepts, build rules and problem solve. Moreover, since they are in a situation where they observe others, they model, interpret, imitate and adopt learning patterns. The students transpose tested knowledge as well as their own knowledge based on maturation, experience, and knowledge acquisition and processing.

They do this based on their defined learning objectives, their maturation, their cognitive ability to think in the abstract and their ability to perform. At times, they actively construct and invent building up their schema by assimilating and accommodating information and by interpreting it while they passively take in information and carry out activities with very little reflection relating their learning to their learning environment. The information learned may be stored for a period of a short time or a long time. What ever the period is for students to learn, they may encode the information visually, through meaning, through imagery, through elaboration, and through organization to store the material and to retrieve the information to say that learning has taken place (MacGilchrist, Myers & Reed 1997; Atkinson et al., 1996; Gage & Berliner, 1992; Bigge & Shermis 1992; Alessi & Trollip, 1991; Gagne 1985)

LINKING IT & LEARNING

With an understanding of how students learn, an educator can use the aid of the computer as a partner to help overcome weaknesses in the system since the computer provides the students with an environment that promotes the leaning theories and conditions. Research conducted by Sabieh (1999b; 1998) demonstrated the link between the learning theories and conditions and the use of the computer as a tool to provide the students with a guaranteed learning environment. Accordingly, the computer provides the students with direct, conscious, and interactive relationship. It enables the students to become responsible; they control the material presented to them by the computer, they control and master their own learning situations, and they are able to enjoy and be engaged in their learning (Collins, Hammond, Wellington 1997; Ives, 1991). The material is presented in a way that the students may encode it simply using their senses. They may be asked to do more complex and abstract activities such that they interpret, problem solve, explore options and provide solutions. The feedback they receive is immediate and informational enabling them to feel a sense of accomplishment, self esteem (Kluger & Adler, 1993). They are motivated intrinsically and extrinsically (Morrison, Ross, Gapalakrishnan & Casey, 1995). They are given the freedom to decide on their performance based on their feedback, on their goals and their needs (Bennett, 1996). Moreover, it gives the students recognition and respect from their teacher, their peers and their family because they have self fulfilled their learning needs.

Understanding how the computer enhances a learning environment is not sufficient grounds to get the educator to implement the use of technology in his kingdom..

TRAINING THE EDUCATOR

The educator must be comfortable with the use of the technology itself and must be familiar with how each activity type program works. Hurst (1994) believes that training in the use of the technology is a must if the educator is to make the most effective use of the power technology has to offer him. Such training must teach the educator that the technology is a means to help him attain the end product: learned students.

This Sabieh advocates can only be accomplished with hands-on experience. The hardware and the software are introduced and used in context. First, the educator acquires the basic skill of its use, and, then, he acquires the skill of its application in an educational environment. He must build a relationship with the technology to be able to get his students to build one. He must feel the power of the technology to motive, to keep the individual on task and to become engaged, excited and curious. He must feel that his needs are being met. If he acquires all this, he will be more inclined to become innovative and to try out new paths of learning on his students. He will be willing to explore with the intention to create a powerful learning experience for his students. The educator wants to be able to transmit the message to his students that through the technology, learning is fun (Fatt 2000).

It is important to ensure that the training takes place in a setting where learning and teaching environment are appropriate. The educator according to Hope (1996) must be given enough training hours and time to adjust to the new technology. His training must be made as simple as possible. Thus , the training environment must be non-threatening.

The training an educator receives must be planned. Abbott and Faris (2000) note that very little insight exists on what should exactly go into building strategies for effective training. It is very straightforward to teach how to use the technology, but, it is not so when it comes to teaching technology in the education classroom. Pachler (1999) and Abott and Faris (2000) believe that the training the educator recieves is not only on how to use the technology but on how to incorporate the technology in his teaching strategies and activities. So, the training courses taught should reflect the principles of teaching and learning to which the technology is linked to. Likewise, the group size should not exceed eight to twelve students since there is unfamiliarity with the technology.

Kavanaugh-Brown (2000) believes the training must meet the specific needs of the educator. Accordingly, it is suggested that the training course material consider teacher productivity, multimedia, curriculum integration and collaboration. However, it is important that the educator's skill is assessed and his training is implemented depending on his level of experience with technology.

Using Vygosky's theory of cognitive development, an educator's zone of proximal development may be considered. This may help the trainer determine what the educator knows and what he has potential to know so that his training will be more focused. With this in mind, Sabieh advocates that the hands-on training can be divided into four preparatory levels. Level one will focus on familiarizing the educator with the computer. Level two will focus on familiarizing the educator with software. Level three will focus on instructional technology. Level four will focus on the use of the technology in a specific subject matter to enhance the teaching and learning environment. Each level will build strategies for use. Each level will integrate old material with new and relate the information to pedagogical methods.

Along with the training period, the educator must have ongoing workshops, support and mentoring throughout the academic year. This may even take place after school hours (Shelton & Jones 1996). McKay and McGrath (2000) suggest that material for classroom use should be developed and integrated in the workshop sessions. This will help the educator take pride in the new skills he is acquiring; he will be confident and

motivated to explore and create ways to integrate the technology into his kingdom. Zirkle (2000) believes that the dilemma to keep up with the pace of change is continuous and that learning by doing is the best way to train the educator. Moreover, Zirkle suggests that an educator read journal articles, explore the web and ask the students for instruction and aid since they are part of the digital world. Also, Abbott & Faris (2000) suggest that an educator can actually build confidence in the classroom with the students; they could develop the relationship with technology together in an authentic setting. Stager (1995) believes that the educator acceptance to use technology in the setting as a result of brainstorming sessions, discussing relevant issues related to the education setting and problem solving; this is true because the educator is given his own equipment to use, and he uses time together with his colleagues to share his experiences, plus he is provided with time off to accommodate and connect with the technology (Holzberg 1994).

Self-paced tutorials or site-based courses can be developed as well as practicum with mentors and follow-up support. Lee (1998) notes that time is needed for such learning to take place as well as for use of equipment confidently. Moreover, Kavanaugh-Brown (2000) suggests workshops, web based tutorials, on line academic may be implemented to further strengthen the educator's level and to measure strengths and weaknesses of the training (Hurst 1994). Furthermore, Holzberg (1994) believes in the spirit of participating with other educators. She believes that active participation and communicating with others be they peers, students or persons outside the immediate education setting aids in facilitating learning. Sabieh supports this since it is the educator who is to choose what, where and how to use the information technology.

USING IT IN THE LEARNING ENVIRONMENT

Use of information technology is effective when the educator clearly sets objectives for its use in the education setting. The awareness that both the educator and the students must be proficient in accessing, evaluating and communicating information technology may be the main reason why an educator would promote the use of technology in the higher education setting since the world around them has become digital. However, this is not the only reason for its integration. The educator is to use the technology to enhance the teaching/learning environment. The educator is to determine who is to use the technology: the educator or the students. The educator is to determine in what learning setting it is to be used: the classroom, the laboratory or the home. The methodology to use when implementing its use: is it to be used individually or in a cooperative group setting? Is it to be used for teaching purposes, for remedial or for mastery purposes? Is it to be used for explanatory or exploratory purposes? The educator is to determine what type of software is to be used; content free software, drill & practice, problem solving, games, simulation activity programs or the Internet. The use of information technology must be in relation to the learning objectives set and the use of it in the education setting must be to enhance the learning (Lederman & Niess 2000)

By identifying the reasons for its use in a pedagogical setting determines how the educator is to use the technology. Pachler (1999) published the National Council for Educational Technology's 27 assertions as to why IT works. Of those assertions, Sabieh believes that an educator in higher educator would use the technology for his students to help them acquire information in an organized and meaningful way in a safe non-

threatening environment that would allow flexibility to meet individual needs and abilities. The students would be achieving in such contents as opposed to failing which would be a motivating premise for students to enhance their learning since they are able to understand, assimilate easily, interpret, explore, interact, and share. The students are using visual cues to aid in their understanding (Pachler 1999). Peck and Durricott (1994) also advance the use of technology since students learn and develop cognitively at different rates; it can help students acquire more information in lesser time; and it can improve the quality of students thinking and writing.

The computer is helping the students to learn, but it is also helping the educator in his teaching objective (Pachler 1999). With the technology, the educator has easy access to evaluating the students' knowledge acquisition, and he is able to know when to intervene in the students' learning to help guide the students (Pachler 1999). Lewis and Wall (1988) note IT use is to accomplish tasks involving time, place, and people that the educator cannot do himself in the class setting or that the students can use to enhance their learning. It may also be used to reach students who cannot attend class on campus by having them enroll in distance learning courses. Plus, IT may also be used to free the educator from day to day practice endeavors that the students can accomplish on their own.

There is not doubt that the training the educator receives must make him aware of the changes in his and the students' role in the classroom. The educator must accept that his role in the education setting has changed.

ACCEPTING A NEW ROLE

The educator will use the technology as a partner to help him accomplish his vocation. Together with technology, their power will increase to influence the learning setting (Stager 1995). His role will remain central in that it is he who will direct the students' learning. Pachler (1999) points out that it is the educator who identifies the appropriate learning outcomes and it is the educator who chooses the appropriate methodology, approach, activities and software to use. It is the educator who structures and who sequences the students' learning process be it in the classroom, in the laboratory or at home. In short, Noss and Pechler (1999) note that the role of the educator changes to that of an overall facilitator of learning.

The educator will use the technology to enhance the teaching and learning of the students. In his new role, he will be free to concentrate on meeting other students' needs, on exploring new avenues of learning, and on introducing innovative methods to use the technology in the setting. According to Sabieh (2000a; 2000b; 2000c; 2000d; 2000e; 2000f; 2000g; 2000h; 1999a), the educator is the organizer, the mediator between the computer and the students, the facilitator of instruction, the resource consultant, and the motivator. He meets his students needs and helps them overcome any weakness they may have. He helps them to problemsolve and master their own learning techniques. He encourages (Levesque, 1989) and supports (Hyland, 1993) the students. He will still select, present, create, manipulate, organize, apply, introduce, organize, and discuss learning tasks like he did in his traditional role, but, now, he will deal with the environment in a more learner-centered approach, making both himself and the students' responsible for learning in the setting.

SUMMING UP....

Letting go and letting the students make decisions about their own learning is difficult to do since the educator will remain responsible for the students' acquisition and application of knowledge. However, as the educator develops a confident and positive attitude towards the technology, he will be more willing to accept of his new role. He will perceive the technology as a tool to help him and not as a threat or a replacement.

The element of fear is the greatest challenge an educator can experience. Overcoming the fear of replacement is the way for an educator to gain confidence in theory. However, Sabieh believes this can only be done with hands-on training. It is the receiving of hands-on training, whether it is pre-service, service or post-service training, that will drill its way into the educator's psyche to bring about a change in attitude. It is then that Lord Puttman's conviction about the future's uncertainty will be put to question by researchers and educators (Leask and Pachler 1999) By connecting with the technology, the uncertainty felt will be lessened as faculty development progresses to give IT its potential to help alter the way the educator teaches and the students' learn.

REFERENCES

Abbott, J. A. & Faris, S. E. (2000, Nov.). Integrating technology into preservice literacy instruction: A survey of elementary education students' attitude toward computers. Journal of Research on computing in Education 33 (2), 149-156.

Alessi, S. M. & Trollip, S. R. (1991). Computer Based Instruction: Methods and Development (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Atkinson, R. et al. (1996). Susan Hilgard's Introduction to Psychology (12th ed.). Fortworth, TX: Harcourt Brace Jovanovich.

Barr, R. B. & Tagg, J. (1995). From teaching to learning: A new Paradigm for undergraduate education. Change 27(6), 13-25.

Bennett, F. (1996). Computers as Tutors: Solving the Crisis in Education, (On-line) Available http://www.cris.com/~faben1

Bigge, M. L. & Shermis, S. S. (1992). Learning Theories for Teacher (5th ed.). New York: Harper Collins Publishers.

Brisebois, M. (1991). Vocabulary of educational technology and training. Ottawa: Department of the Secretary of State of Canada.

Collins, J., Hammond, M. & Wellington, J. (1997). Teaching and Learning with Multimedia. London: Routledge.

Davis, R. B. (1996, Winter). Classrooms and cognition. Journal of Education, 178 (1), 3-13.

Fatt, J. P. T. (2000, Summer). Fostering creativity in education. Education 120 (4), 744-754.

Gage, N. L & Berliner, D. C. (1992). Educational Psychology (5th ed.). Boston: Houghton Mifflin Co.

Gagne, R. M. (1985). The Conditions of Learning and Theory of Instruction (4th ed.). Fort Worth, TX: Holt. Rinehart and Winston.

Guild, B. (1997, Sept.). Where do the learning theories overlap? (Teaching for Multiple Intelligences). Educational Leardership, 55 (1), 30-33.

Holzberg, C. S. (1990, May-Jun). Becoming computer-friendly: It's easier than you think! Instructor 103 (9), p. 56-59.

Hope, W. C. (1996, Nov-Dec). Factors facilitating teachers' use of computer technology. The Clearing House 70 (2), 106-108.

Hurst, D. S. (1994, April). Teaching technology to teachers. Educational Leadership 51 (7), 74-76.

Hyland, K. (1993). ESL computer writers: What can we do to help? Systems, 2, 21-30.

Ives, W. (1991). Using computer-controlled audio/video feedback to integrate evaluation and training. Educational Technology Research and Development, 39, 117.

Kavanaugh-Brown, J. (Aug. 2000). An apple for the teacher: Technology in the classroom. American City and County 115 (11), 22- 30.

Kluger L., Avraham, N., & Adler, S. (1993). Person-versus-computer-mediated feedback. Computers in Human Behavior, 9, 1-16.

Leask, M. & Pachler, N. (Eds.). (1999). Forward. Learning to Teach Using ICT in the Secondary School (p. xv). London: Routledge.

Lederman, N. G. & Niess, M. L. (2000, Nov.). Technology for Technology 's sake or for the improvement of teaching and learning? School Science and Mathematics 100 (7), 345-350.

Lee, S. (1998, Spring). The promise of technology. Northwest Education 3 (3), 2-9.

Levesque, J. A. (1989). Using computers to motivate learners. Social Studies and the Young Learner, 2, 9-11.

Lewis, R. J. & Wall, M. (1988). Exploring obstacles to uses of technology in higher education. Washington DC: The Academy for Educational Development, Inc. ERIC Document No. ED 304 073.

MacGilchrist, B., Myers, K. & Reed, J. (1997). The Intelligent School. London: Paul Chapman.

McKay, M. & McGrath, B. (2000, June). Creating internet-based curriculum projects. THE Journal (Technological Horizons in Education) 27 (11), 114-120.

Morrison, G. R., Ross, S. M., Gopalakrishnan, M. & Casey, J. (1995). The effects of feedback and incentives on achievement in computer based instruction. Contemporary Educational Psychology, 20, 32-50.

Noss, R. & Pachler, N. (1999). The challenge of new technologies doing old things in a new way or doing new things? In P. Mortimore, (Ed.) Understanding Pedagogy and its Impact on Learning. London: Sage.

Pachler, N. (1999). Theories of learning and ICT. In M. Leask & N. Pachler (Eds.) Learning to Teach Using ICT in the Secondary School (pp. 3-18). London: Routledge.

Peck, K. L. & Dorricott, D. (1994, April). Why use technology? Educational leadership 5 (7), 11-15.

Sabieh, C. (1998). The use of the computer as a tool and/or tutor to enhance language learning. PhD Dissertation, Université du Saint-Esprit Kaslik., Lebanon. Manuscript submittef for publication.

Sabieh, C. (1999a, March) Is computer assistance the solution to enhance learning? Paper presented at the Education Formation: Facts and Ambitions Teacher Training Conference, Yarmouk University, Irbid, Jordan.

Sabieh, C. (1999b, July). The Psychology of Learning and the Use of the computer: A Link to a Solution. Paper presented at the National Communication Association's Summer Conference on Communication and Technology, Virginia, USA.

Sabieh, C. (2000a, May-June). Computer assistance: The solution to enhance learning. In A. Al-Riyani (Ed.), The non-Governmental Higher Education Conference: Vol. 3, Non-Governmental Higher Education and the Futuristic Horizons (pp. 183-206). Sana'a, Yemen: Queen Arwa University Press.

Sabieh, C. (2000b, May) Computers in education: Is fear the problem? Paper presented at the Practical Teaching ideas for a New Millennium SPELT TIE-IN, Damascus, Syria.

Sabieh, C. (2000c, November). An improved English language education system with computer assistance. Paper presented at the English Regional Conference on Language and Change, Lebanese American University, Beirut, Lebanon. (in press)

Sabieh, C. (2000d, June). Is it just a computer? Paper presented at the International Conference on Technology in Mathematics Education, Lebanese American University, Beirut, Lebanon. (in press)

Sabieh, C. (2000e). The psychology of learning and the use of the computer: A practical solution. In H. E. Klein (Ed.), Creative International Teaching: Case Method and Other Techniques (pp. 231-245). Boston:WACRA.

Sabieh, C. (2000f, Nov.). Reform or Chaos: A Question of Ignorance in a World ofTechnological Advances. Paper presented at the Conference in School Based Reform in Arab Countries, American University of Beirut, Beirut, Lebanon. (in press)

Sabieh, C. (2000g, May) To integrate the use of computer into Lebanon's new English curriculum as an aid to enhance learning. Paper presented at the New Lebanese Curriculum for Language: Arabic, English and French conference, Notre Dame University, Zouk Mosbeh, Lebanon. (in press)

Sabieh, C. (2000h, Dec.). Together with Technology, WE Build Students. Paper presented at the Conference on Educational Administration in the Arab States: Issues and Prospects for Reform, LAES. (in press)

Shelton, M. & Jones, M. (1996, Oct.). Staff development that works! A tale of four t's. NASSP Bulletin 80 (582), 99-107.

Silber, K. H. (1970). What field are we in, anyhow? Audiovisual Instruction, 15(5), 21-24.

Stager, G. S. (1995, Oct.). Laptop schools lead the way in professional development. Educational Leadership 53 (2), 78-83.

Sutphin, D. (1987, Feb.). Educating teachers on instructional applications of microcomputers. T H E Journal (Technological Horizons in Education), 14 (6), 54-59.

UNESCO. (1992). Glossary of educational technology terms. Paris: Author

Vygostsky, L. S. (1978). In Gage, N. L & Berliner, D. C. (1992). Educational Psychology (5th ed.). Boston: Houghton Mifflin Co.

Zirkle, C. (2000, Oct.) Brining IT into the classroom. Techniques 75 (7), 15.

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